

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**10**

**DECISION**

**TOPIC**      **Final Rule: Chapters 22 and 23: Air Quality Program Rules – Adoption of federal air quality standards and revisions to air construction permit requirements**

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The Department is requesting that the Commission adopt amendments to Chapter 22 "Controlling Pollution" and Chapter 23 "Emission Standards for Contaminants" of the 567 Iowa Administrative Code.

The primary purpose of the rule changes is to adopt new federal regulations affecting stationary internal combustion engines, gasoline distribution facilities and surface coating operations, and to amend the state air construction permitting requirements to better accommodate the new regulations. Additional, minor amendments to other federal regulations are also being adopted.

Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on November 5, 2008, as ARC 7306B. A public hearing was held on December 8, 2008. The Department did not receive any comments at the public hearing. The Department received two written comments before the public comment period closed on December 9, 2008.

The public comments submitted pertain to Item 1 and Item 7 and are described briefly in the rulemaking preamble for the respective items. Additionally, a public participation responsiveness summary is attached to this agenda item. The Department did not make any changes to the adopted rules from what was published in the Notice.

Over the last year, EPA finalized several new air quality regulations under two programs authorized by federal Clean Air Act (CAA), the New Source Performance Standards (NSPS) program and the National Emissions Standards for Hazardous Air Pollutant (NESHAP) program. These programs require new and existing facilities in a particular industry sector that construct and operate specific equipment to meet uniform standards for air pollutant emissions.

This rulemaking includes adoption of new federal NSPS and NESHAP impacting facilities that previously had few, if any, air quality requirements. Because of the potential impacts to small businesses and previously unregulated facilities, the Department developed implementation strategies in conjunction with the rulemaking. The strategies include cooperative efforts with University of Northern Iowa – Iowa Air Emissions Assistance Program (UNI), Iowa Department of Economic Development (IDED), the Linn and Polk County local air quality programs, and other interested associations and organizations, to provide outreach, education and compliance assistance to stakeholders. The Department's outreach efforts began in mid-2008, continued during the rulemaking process, and will continue upon final adoption of these rules.

It is hoped that these new rules in conjunction with the Department's outreach efforts will result in reductions in air toxic and other air pollutant emissions while minimizing the regulatory burden to small businesses and other affected facilities.

The specific items included in the adopted rules are summarized below. Because adoption of new NSPS and NESHAP are the primary reason for this rulemaking, these changes are paired with the items describing the complementary changes to permit requirements.

### ***New requirements for Stationary Internal Combustion Engines (Items 1, 3, 4, 5 and 6)***

#### **New Source Performance Standards (NSPS) – Items 3 and 4**

The Department is adopting new NSPS for stationary spark ignition internal combustion engines (SI engines). SI engines are typically gasoline fueled, but also include engines with spark plugs that burn other fuels. SI engines are used at power plants, industrial sources and other facilities to generate electricity and to power pumps and compressors.

The standards for new SI engines will limit emissions of NO<sub>x</sub>, carbon monoxide (CO) and volatile organic compounds (VOC). All sizes of new stationary SI engines are covered under this NSPS. The NSPS phases in more stringent emissions requirements for engines with later manufacture dates. The standards are similar to the NSPS for stationary compression ignition (CI) engines (diesel engines) that the Department adopted in February 2007.

#### **National Emission Standards for Hazardous Air Pollutants (NESHAP) – Items 5 and 6**

The Department is adopting recent federal amendments to the NESHAP for stationary reciprocating internal combustion engines (RICE). The amendments include standards to limit hazardous air pollutants (HAP), or air toxics emissions, from new and reconstructed engines located at area sources. The amendments also include standards to regulate HAP from smaller-sized engines located at major sources.

Area sources are usually smaller commercial or industrial operations that typically release lesser quantities of HAP. Specifically, area sources have potential emissions less than 10 tons per year (tpy) of any single HAP and less than 25 tpy of any combination of HAP. Facilities that have potential HAP emissions greater than or equal to these levels are classified as major sources of HAP.

Generally, the RICE NESHAP requires new and reconstructed engines to meet the NSPS requirements for CI or SI engines. Existing engines located at area sources are not covered under these new regulations. However, EPA has published a notice in the Federal Register stating that EPA plans to issue standards in the future for existing engines located at area sources.

### Construction Permit Requirements for Small, Stationary Engines – Item 1

Currently, stationary internal combustion engines less than 400 horsepower (HP) are eligible to be exempt from the requirement to obtain a construction permit. When this exemption was originally adopted into state rules, there were no federal requirements applicable to these smaller engines. The new NSPS and NESHAP regulations require all sizes of new, modified or reconstructed engines to meet certain emissions requirements.

To address this, the Department is amending the 400 HP exemption to require submittal of a registration certifying NSPS and NESHAP compliance prior to installation of the engine. The registration will guide owners and operators of affected facilities through a series of questions that will assist them in ensuring that the engine they order and install complies with the NSPS and NESHAP, while still allowing the engine to be exempt from the requirement to obtain a construction permit. The registration will also assist the Department air quality and field office staff to ensure that affected facilities are in compliance.

### ***New Requirements for Gasoline Distribution and Dispensing (Items 5 and 7)***

#### NESHAP for Bulk Gasoline Distribution

The NESHAP for gasoline distribution applies to bulk gasoline facilities, such as bulk plants, bulk terminals, and pipeline breakout stations. The NESHAP will reduce VOC and HAP from gasoline vapors, including benzene emissions.

Bulk terminals and pipeline breakout stations are required to control emissions through submerged filling at tanks and loading racks and controls on gasoline storage tanks. Owners and operators of larger terminals must capture and control gasoline vapors at the loading rack.

Bulk plants have lower monthly gasoline throughputs than terminals or breakout stations. Owners and operators of bulk plants are required to control gasoline vapors by use of submerged filling at tanks and loading racks. The Department estimates that there may be 100-200 bulk plants affected by the NESHAP. However, owners and operators of bulk gasoline plants are already required to use submerged filling at tanks under existing state rules for underground storage tanks (UST) and flammable liquids.

The Department is working with Petroleum Marketers and Convenience Stores of Iowa (PMCI) to identify the affected bulk plants. The Department met with PMCI and other stakeholders on August 21 and plans to continue working closely with stakeholders.

#### NESHAP for Gasoline Dispensing Facilities

The second area source NESHAP being adopted affects gasoline dispensing facilities, such as gas stations. Like the NESHAP for bulk facilities, this NESHAP will reduce VOC and HAP from gasoline vapors, including benzene emissions. These standards apply to gasoline cargo tanks (trucks) and each storage tank. The NESHAP does not apply to equipment used for refueling motor vehicles (gasoline pumps).

The gasoline dispensing NESHAP requirements are based on the actual, monthly throughput of gasoline at the facility. Under the NESHAP, owners and operators of smaller facilities are

required to follow specified "good management practices" (GMP) to minimize gasoline evaporation. Owners and operators of medium sized facilities are required to follow GMP and use submerged filling of gasoline tanks. Owners and operators of large facilities must employ GMP, submerged fill, and a vapor balance system during storage tank loadings.

Owners and operators of affected gasoline dispensing facilities (GDF) are already required to implement GMP and submerged fill under existing administrative rules for UST and flammable liquids. Vapor balancing is not required under existing state rules. The Department estimates that approximately 250 larger GDF will need to implement vapor balancing. However, approximately 50 of these facilities already use vapor balancing, and nearly all of the remaining 200 facilities will have until January 2011 to comply with the NESHAP requirements.

The Department has been corresponding regularly with EPA, PMCI and a number of affected facilities regarding the new requirements. The Department met with PMCI and other stakeholders on August 21<sup>st</sup> and plans to continue working closely with stakeholders.

Construction Permit Requirements for Bulk Plants and Gasoline Dispensing Facilities (GDF)  
Because bulk plants and GDF that are minor sources (not Title V) previously had very few, if any, federal or state air quality requirements, the Department has not sought construction permits from these facilities. For small and medium sized GDF, compliance with current UST and flammable liquids regulations will also serve as compliance with the NESHAP. For larger GDF that will need to install vapor balance systems, the owners and operators of these facilities are generally aware of the requirements and will be working to meet the January 2011 compliance date. The Department will work with PMCI and affected facilities to assist with compliance. At this time, the Department does not plan to require air construction permits from GDF.

Because of how the NESHAP defines throughput at bulk gasoline facilities, it appears that bulk plant owners and operators will need to obtain enforceable gasoline throughput limits by January 2011 if they wish to avoid having their facilities classified as terminals. The Department estimates that nearly all of 100-200 bulk plants affected by the NESHAP do not have construction permits. At the August 21 meeting, the Department discussed a streamlined permitting strategy with stakeholders. The Department is still developing this strategy.

### ***New Requirements for Auto body Refinishing and Miscellaneous Surface Coating (Items 2, 5 and 7)***

#### NESHAP Requirements (Items 5 and 7)

The third area source NESHAP being adopted affects paint stripping and certain surface coating operations, including spray coating of motor vehicles and mobile equipment.

Currently, the Department is aware of only one facility that may be affected by the paint stripping provisions of this NESHAP.

The NESHAP requirements for surface coating require owners and operators of facilities that spray apply coatings containing certain "target HAP" to control HAP through a variety of means. In brief, owners and operators at affected facilities must enclose spray areas, use high efficiency

paint guns, capture 98% of overspray, capture paint and solvent when cleaning, and train and certify paint operators. Owners and operators at existing facilities will have until January 2011 to either switch to coatings that do not contain the target HAP, or to comply with the NESHAP requirements. The Department estimates that 1000 minor source facilities may be subject to the NESHAP, but that many of these facility owners and operators will choose to stop using the target HAP prior to the NESHAP compliance date

The Department, in cooperation with UNI, IDED, and Linn and Polk County local air programs, hosted the first stakeholder meeting on July 15. The 30 participants received a presentation on the NESHAP and air permitting requirements, a draft guide and other outreach materials. The participants provided valuable input at this initial meeting, and the Department and UNI will be offering additional presentations and compliance assistance tools over the next 18 months.

#### Construction Permit Requirements (Item 2)

Currently, facilities that spray apply three (3) gallons or less of material per day are eligible for the permit by rule for spray booths (PBR). The owners or operators of PBR-eligible facilities simply complete a notification letter certifying that they meet the PBR requirements.

At the time the PBR was adopted, small spray operations were not subject to any federal air quality regulations. Under the new NESHAP, the owner or operator of any size facility that uses target HAP must comply with the NESHAP. Additionally, owners and operators that spray coat motor vehicles and mobile equipment must petition for an exemption if they choose not to use the target HAP.

To accommodate the new NESHAP requirements, the Department is amending the PBR requirements and the accompanying DNR form to require that an owner or operator certify that the facility is in compliance with or otherwise exempt from the NESHAP. The revised PBR form will guide owners and operators through a series of questions that will assist them with the NESHAP. Owners and operators of existing facilities that choose to continue using the target HAP will need to re-apply for the PBR to certify compliance prior to the NESHAP compliance date. These rule changes will assist the Department air quality and field office staff in ensuring NESHAP compliance, while still allowing smaller spray operations to use a streamlined permit.

#### ***Adoption of Additional NSPS and NESHAP amendments (Items 3 and 5)***

The Department is also adopting additional, federal amendments to existing NSPS and NESHAP. These amendments consist of administrative changes, technical updates and clarifications, and are summarized in the attached Adopted and Filed rulemaking.

If the Commission approves the final rules, the final rules will be published in the Iowa Administrative Code on February 11, 2009, and will become effective on March 18, 2009.

An administrative rule fiscal impact statement and a public participation responsiveness summary are attached.

Christine Paulson  
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Program Development Section, Air Quality Bureau  
Memo date: December 22, 2008

## ENVIRONMENTAL PROTECTION COMMISSION [567]

### Adopted and Filed

Pursuant to the authority of Iowa Code section 455B.133, the Environmental Protection Commission hereby amends amend Chapter 22, “Controlling Pollution,” and Chapter 23, “Emission Standards for Contaminants,” Iowa Administrative Code.

The primary purpose of the rule making is to adopt new federal regulations affecting stationary internal combustion engines, gasoline distribution facilities and surface coating operations and also to amend the state air construction permitting requirements to better accommodate the new federal regulations. The amendments adopt by reference additional, minor amendments to federal regulations.

Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on November 5, 2008, as **ARC 7306B**. A public hearing was held on December 8, 2008. The Department did not receive any oral or written comments at the public hearing. The Department received two sets of written comments before the public comment period closed on December 9, 2008.

The public comments submitted pertain to Item 1 and Item 7 and are described below for the respective items. Additionally, the submitted comments and the Department’s response to those comments are summarized in more detail in a responsiveness summary available from the Department. The Department did not make any changes to the adopted rules from what was published in the Notice.

Over the last year, the U.S. Environmental Protection Agency (EPA) finalized several new air quality regulations under two programs authorized by the federal Clean Air Act (CAA),

the New Source Performance Standards (NSPS) program and the National Emission Standards for Hazardous Air Pollutants (NESHAP) program. These programs require new and existing facilities in a particular industry sector that construct and operate specific equipment to meet uniform standards for air pollutant emissions. The NSPS program typically addresses “criteria pollutants,” such as fine particulate, sulfur dioxide (SO<sub>2</sub>), or nitrogen oxides (NO<sub>x</sub>), whereas the NESHAP program addresses hazardous air pollutants (HAP), sometimes called air toxics. NSPS and NESHAP requirements vary depending on the processes, activities or equipment being regulated, and whether the processes, activities or equipment are considered to be new or existing.

This rule making includes adoption of new federal NSPS and NESHAP requirements potentially impacting facilities or businesses that previously had few, if any, air quality requirements. Because of the potential impacts to small businesses and previously unregulated facilities, the Department is developing implementation strategies in conjunction with the rule making. The strategies include cooperative efforts with the University of Northern Iowa – Iowa Air Emissions Assistance Program (UNI), Iowa Department of Economic Development (IDED), the Linn and Polk County local air quality programs, and other interested associations and organizations to provide outreach, education and compliance assistance to stakeholders.

The Department's outreach efforts began earlier this year, continued during the rule-making process, and will go on after the new rules are adopted. The implementation strategies will depend on the specific rule requirements and on stakeholder needs, but will include informational meetings, workshops, training, fact sheets, guides, and Web-based compliance tools.

It is hoped that this rule making, in conjunction with the Department's outreach efforts,



will result in reductions in air toxic and other air pollutant emissions while minimizing the regulatory burden to small businesses and other affected facilities.

Item 1 amends paragraph 22.1(2)“r,” the construction permit exemption for internal combustion engines with a brake horsepower rating of less than 400. The Department is amending this exemption because of the new NSPS and NESHAP requirements for stationary internal combustion engines. At the time this exemption was first adopted in the mid-1990s, there were no federal air quality requirements applicable to these smaller engines. The new NSPS and NESHAP regulations for engines are rather complex and lengthy and require all sizes of new, modified and reconstructed stationary internal combustion engines to meet certain emissions requirements. To address federal changes, the Department is amending the construction permit exemption to require submittal of a registration certifying NSPS and NESHAP compliance prior to installation of the engine. The registration form will provide the owners and operators of affected facilities a series of questions to ensure that the engine they order and install complies with the NSPS and NESHAP, while still allowing the owner or operator to be exempt from the requirement to obtain a construction permit. The registration will also assist the Department air quality and field office staff in ensuring that affected facilities are in compliance.

The Department received written comments from John Deere Waterloo Works regarding this amendment. In summary, the commenter stated that requiring registration of these engines would not be a benefit to the regulated community and would not lead to better compliance with the NSPS or NESHAP requirements.

The Department disagrees with these comments. Although facilities such as John Deere may be well versed in the NSPS and NESHAP requirements for engines and may easily be able

to ensure purchase of manufacturer certified engines, this may not be the case with other facilities. Based on feedback received from stakeholders and the Department's small business assistance partners, the Department maintains that the registration forms will provide compliance assistance to many owners and operators of small engines, and that completion and submittal of the registration forms will result in better NSPS and NESHAP compliance.

Item 2 amends subrule 22.8(1), the permit by rule for spray booths (PBR). The Department is amending the PBR provisions to reflect new NESHAP requirements for surface coating operations. At the time the PBR was first adopted, small spray operations were not subject to any federal air quality regulations. Under new NESHAP requirements, the owner or operator of any size of facility that spray applies materials containing any of the "target HAP" specified under the NESHAP must comply with numerous requirements. Additionally, owners and operators that spray coat motor vehicles and mobile equipment and choose not to use materials containing the "target HAP" must still petition for an exemption from the NESHAP requirements.

Currently, owners and operators of facilities that spray apply three gallons or less of materials per day are eligible to use the PBR. The owners or operators of PBR-eligible facilities simply complete a notification letter certifying that they meet the PBR requirements. To accommodate the new federal requirements, the Department is amending the PBR requirements and the Department's accompanying form to require that an owner or operator certify that the facility is in compliance with or otherwise exempt from the NESHAP. The revised PBR form will provide owners and operators a series of questions that will assist them in complying with the NESHAP. Owners and operators of existing facilities that choose to continue using the target HAP will need to reapply for the PBR to certify compliance prior to the NESHAP

compliance date. The amendment to subrule 22.8(1) will assist the Department air quality and field office staff in ensuring NESHAP compliance, while still allowing smaller spray operations to use a streamlined permit.

Item 3 amends the introductory paragraph of subrule 23.1(2), the provisions adopting by reference the federal New Source Performance Standards (NSPS) contained in 40 CFR Part 60. The specific NSPS requirements being adopted are described in Item 4. EPA also took final action regarding an existing NSPS for equipment leaks of volatile organic compounds (VOC) in the synthetic organic chemicals manufacturing industry (SOCMI) and at petroleum refineries. EPA extended the stay of certain compliance requirements in the federal regulations.

Item 4 amends subrule 23.1(2) by adding new paragraph “zzz” to adopt the new NSPS for stationary spark ignition internal combustion engines (SI engines). SI engines are typically gasoline fueled, but also include engines with spark plugs that burn other fuels. SI engines are used at power plants, industrial sources and other facilities to generate electricity and to power pumps and compressors.

The new standards for SI engines will limit emissions of NO<sub>x</sub>, carbon monoxide (CO) and volatile organic compounds (VOC). The standards apply to larger SI engines (500 horsepower or greater) manufactured or ordered after July 1, 2007, to smaller SI engines manufactured or ordered after July 1, 2008, and to any size of SI engine modified or reconstructed after June 12, 2006. The NSPS phases in more stringent emissions requirements for engines with later manufacture dates. This NSPS is similar to the NSPS for stationary compression ignition (CI) engines. CI engines are typically diesel fueled. The Department adopted the NSPS for CI engines in February 2007.

Item 5 amends subrule 23.1(4), the emission standards for hazardous air pollutants for

source categories, also known as National Emission Standards for Hazardous Air Pollutants or NESHAP, to adopt recent amendments that EPA made to 40 CFR Part 63. The specific NESHAP requirements being newly adopted or amended are described in Items 6 and 7. EPA also issued final amendments to existing NESHAP as follows:

- EPA issued amendments to the NESHAP for dry cleaning facilities (Subpart M). These amendments add clarity to, and better explanations of, the types of equipment included in the standards, the testing and monitoring requirements, and the reporting and record-keeping requirements. The amendments also correct typographical errors.

- EPA issued amendments to the NESHAP for semiconductor manufacturing (Subpart BBBB). The Department is not aware of any facilities in Iowa currently subject to this NESHAP. These amendments establish a new maximum achievable control technology floor level of control for existing and new combined process vent streams containing inorganic and organic HAP. The amendments also clarify the emission requirements for process vents by adding definitions for organic, inorganic, and combined process vent streams that contain both organic and inorganic HAP.

- EPA issued final amendments to the NESHAP for organic liquids distribution (non-gasoline) (Subpart EEEE). The amendments clarify, add flexibility to, and extend some of the compliance dates for storage tanks. The amendments also clarify the requirements for monitoring of storage tank pressure relief devices.

Item 6 amends paragraph 23.1(4)“cz,” the NESHAP for stationary reciprocating internal combustion engines (RICE) (Subpart ZZZZ). The amendments include standards to limit HAP from new and reconstructed engines located at area sources. The amendments also include standards to regulate HAP from smaller-size engines located at major sources.

Area sources are usually smaller commercial or industrial operations that typically release less HAP. Specifically, area sources have potential emissions less than 10 tpy (tons per year) of any single HAP and less than 25 tpy of any combination of HAP. Facilities that have potential HAP emissions greater than or equal to these levels are classified as major sources for HAP.

Generally, the RICE NESHAP requires new and reconstructed engines to meet the NSPS requirements for CI or SI engines. Existing engines located at area sources are not covered under these new regulations. However, EPA has published a notice in the Federal Register stating that EPA plans to issue standards in the future for existing engines located at area sources.

Item 7 amends subrule 23.1(4) by adopting new paragraphs “eb,” “ec,” and “eh.” This amendment adopts by reference three new NESHAP for new and existing area sources for the following source categories: (1) bulk gasoline facilities such as bulk plants, bulk terminals, and pipeline breakout stations (Subpart BBBBBB); (2) gasoline dispensing facilities (GDF) such as gas stations (Subpart CCCCCC); and (3) paint stripping and miscellaneous surface coating operations (Subpart HHHHHH)

The area source NESHAP for bulk gasoline distribution will reduce VOC and HAP from gasoline vapors, including benzene emissions. Bulk terminals and pipeline breakout stations typically have higher monthly gasoline throughputs, and the owners and operators are required to control emissions through submerged filling at tanks and loading racks and controls on gasoline storage tanks. Owners and operators of larger terminals must capture and control gasoline vapors at the loading rack. The Department has received initial notification from approximately 20 existing facilities that will be subject to the NESHAP. Existing facilities will need to comply

with the NESHAP by January 2011.

Bulk gasoline plants have lower monthly gasoline throughputs than terminals or breakout stations. Owners and operators of bulk plants are required to control gasoline vapors by using submerged filling at tanks and loading racks. The Department estimates that there may be 100 to 200 bulk plants affected by the NESHAP. However, owners and operators of bulk plants are already required to use submerged filling at tanks under existing state rules for underground storage tanks (UST) and for flammable liquids. The Department is working with the Petroleum Marketers and Convenience Stores of Iowa (PMCI), EPA and industry consultants to assist affected facilities with the new NESHAP requirements. The Department met with PMCI and other bulk plant stakeholders on August 21, 2008, and plans to continue working closely with stakeholders.

The second area source NESHAP being adopted by reference affects gasoline dispensing facilities (GDF) such as gas stations. Like the NESHAP for bulk facilities, this NESHAP will reduce VOC and HAP, including benzene emissions, from gasoline vapors. These standards apply to gasoline cargo tanks (trucks) and each storage tank. The NESHAP does not apply to equipment, such as gasoline pumps, used for refueling motor vehicles.

The gasoline dispensing NESHAP requirements are based on the actual, monthly throughput of gasoline at the facility. Under the NESHAP, owners and operators of smaller facilities are required to follow specified good management practices (GMP) to minimize gasoline evaporation. Owners and operators of medium-size facilities are required to follow GMP and use submerged filling of gasoline tanks. Owners and operators of large facilities (greater than or equal to 100,000 gallons/month gasoline throughput) must employ GMP, submerged fill, and a vapor balance system during storage tank loadings.

Owners and operators of GDF are already required to implement GMP and submerged fill under existing administrative rules for UST and for flammable liquids. Vapor balancing is not required under existing administrative rules. The Department estimates that the owners and operators of approximately 250 large GDF will need to implement vapor balancing. However, approximately 50 of these facilities already use vapor balancing, and nearly all of the remaining 200 facilities will have until January 2011 to comply with the NESHAP requirements.

On June 25, 2008, EPA amended the NESHAP provisions affecting new, large GDF. EPA amended the pressure and vacuum vent valve cracking pressure and leak rate requirements for vapor balance systems used to control emissions from gasoline storage tanks at gasoline dispensing facilities. Newly constructed or reconstructed gasoline dispensing facilities must comply with the requirements of these amendments by the effective date of the EPA amendments (September 23, 2008), or upon start-up, whichever is later.

The Department has been corresponding regularly with EPA, PMCI and a number of affected facilities regarding the new requirements. The Department met with PMCI and other stakeholders on August 21, 2008, to formulate an outreach and compliance assistance strategy, and plans to continue working closely with stakeholders.

At the August 21 meeting, the Department learned that a number of new, large GDF would be unable to retrofit their equipment with vapor balance systems in time to comply with the NESHAP compliance date. Originally, the Department believed that the federal rules allowed these facilities to request formal compliance extensions. Upon further review of the NESHAP regulations and discussions with EPA Region VII, the Department now realizes that formal compliance extensions are only available for facilities considered “existing” under the NESHAP, and not those considered “new” or “reconstructed.” EPA Region VII submitted

written comments requesting that the Department clarify this point in the preamble of the final rulemaking. The Department is making this clarification.

In the absence of providing formal compliance extensions, the Department is working with new GDF that have not met the NESHAP deadlines to ensure that these facilities install the required vapor balance systems as expeditiously as possible.

The third area source NESHAP being adopted by reference affects paint stripping and certain surface coating operations, including spray coating of motor vehicles and mobile equipment. Currently, the Department is aware of only one Iowa facility that may be affected by the paint stripping provisions of this NESHAP.

The requirements for miscellaneous surface coating, which includes spray application of coatings to motor vehicles or mobile equipment, require owners and operators of facilities that spray apply coatings containing certain “target HAP” to control HAP through a variety of means. In brief, affected facility owners and operators must enclose spray areas, use high efficiency paint guns, capture 98 percent of overspray, capture paint and solvent when cleaning, and train and certify paint operators. Owners and operators of existing facilities will have until January 2011 to either switch to coatings that do not contain the “target HAP” or to comply with the NESHAP requirements. The Department estimates that 1,000 minor source facilities may be subject to the NESHAP, but that many of the facility owners and operators will choose to stop using the “target HAP” prior to the NESHAP compliance date.

The Department, in cooperation with UNI, IDED, and Linn and Polk County local air quality programs, hosted the first stakeholder meeting on July 15, 2008. The 30 participants received a presentation on the NESHAP and air permitting requirements, a draft guide and other outreach materials. The participants provided valuable input at this initial meeting, and the



Department will be offering additional meetings and compliance assistance tools over the next 18 months.

This NESHAP will also impact approximately 15 Title V facilities that are currently considered to be area sources for HAP. The Department will be working directly with owners and operators of these facilities regarding the new NESHAP requirements.

These amendments are intended to implement Iowa Code section 455B.133.

The following amendments are adopted.

These amendments will become effective on March 18, 2009.

**ITEM 1.** Amend paragraph **22.1(2)“r”** as follows:

r. An internal combustion engine with a brake horsepower rating of less than 400 measured at the shaft, provided that the owner or operator meets all of the conditions in this paragraph. For the purposes of this exemption, the manufacturer's nameplate ~~rating~~ rated capacity at full load shall be defined as the brake horsepower output at the shaft. ~~An internal combustion engine may be subject to the new source performance standards (NSPS) for stationary compression ignition internal combustion engines set forth in 40 CFR Part 60, Subpart III, as adopted by reference in 567—~~ paragraph 23.1(2)“yyy.” The owner or operator of an engine that was manufactured, ordered, modified or reconstructed after [insert effective date of these amendments] may use this exemption only if the owner or operator, prior to installing, modifying or reconstructing the engine, submits to the department a completed registration, on forms provided by the department, certifying that the engine is in compliance with the following federal regulations:

(1) New source performance standards (NSPS) for stationary compression ignition internal combustion engines (40 CFR Part 60, Subpart III); or

(2) New source performance standards (NSPS) for stationary spark ignition internal combustion engines (40 CFR Part 60, Subpart JJJJ); and

(3) National emission standards for hazardous air pollutants (NESHAP) for reciprocating internal combustion engines (40 CFR Part 63, Subpart ZZZZ).

Use of this exemption does not relieve an owner or operator from any obligation to comply with ~~the~~ NSPS or NESHAP requirements.

**ITEM 2.** Amend subrule 22.8(1) as follows:

**22.8(1)** Permit by rule for spray booths. Spray booths which comply with the requirements contained in this rule will be deemed to be in compliance with the requirements to obtain an air construction permit and an air operating permit. Spray booths which comply with this rule will be considered to have federally enforceable limits so that their potential emissions are less than the major source limits for regulated air pollutants and hazardous air pollutants as defined in 567—22.100(455B).

a. Definition. “Sprayed material” is material sprayed from spray equipment when used in the surface coating process in the spray booth, including but not limited to paint, solvents, and mixtures of paint and solvents.

b. Facilities which facilitywide spray one gallon per day or less of sprayed material are exempt from all other requirements in 567—Chapter 22, except that they must submit the certification in 22.8(1) “e” to the department and keep records of daily sprayed material use. The ~~facility~~ owner or operator must keep the records of daily sprayed material use for 18 months from the date to which the records apply. The owner or operator must also certify that the facility is in compliance with or otherwise exempt from the federal regulations specified in 22.8(1) “e.”

c. Facilities which facilitywide spray more than one gallon per day but never more than three gallons per day are exempt from all other requirements in 567—Chapter 22, except that they must submit the certification in 22.8(1)“e” to the department, keep records of daily sprayed material use, and vent emissions from a spray booth(s) through a stack(s) which is at least 22 feet tall, measured from ground level. The facility owner or operator must keep the records of daily sprayed material use for 18 months from the date to which the records apply. The owner or operator must also certify that the facility is in compliance with or otherwise exempt from the federal regulations specified in 22.8(1)“e.”

d. Facilities which facilitywide spray more than three gallons per day ~~must comply with all applicable statutes and rules~~ are not eligible to use the permit by rule for spray booths and must apply for a construction permit as required by subrules 22.1(1) and 22.1(3) unless otherwise exempt.

e. Notification letter.

(1) Facilities which claim to be permitted by provisions of this rule must submit to the department a written ~~statement as follows~~ notification letter, on forms provided by the department, certifying that the facility meets the following conditions:

~~“I certify that all paint booths at the facility and listed below are in compliance with all applicable requirements of 567 IAC 22.8(1) and all other applicable requirements, including but not limited to the allowable emission rate for painting and surface coating operations of 0.01 gr/scf of exhaust gas as specified in 567—subrule 23.4(13). I understand that this equipment shall be deemed permitted under the terms of 567 IAC 22.8(1) only if all applicable requirements of 567 IAC 22.8(1) are met. This certification is based on information and belief formed after reasonable inquiry; the statements and information in the document are true, accurate, and~~

complete.”

1. All paint booths and associated equipment are in compliance with the provisions of subrule 22.8(1);

2. All paint booths and associated equipment are in compliance with all applicable requirements, including, but not limited to, the allowable particulate emission rate for painting and surface coating operations of 0.01 gr/scf of exhaust gas as specified in 567—subrule 23.4(13); and

3. All paint booths and associated equipment are in compliance with or otherwise exempt from the national emissions standards for hazardous air pollutants (NESHAP) for paint stripping and miscellaneous surface coating at area sources (40 CFR Part 63, Subpart HHHHHH).

(2) The certification must be signed by one of the following individuals.

~~(1)~~1. For corporations, a principal executive officer of at least the level of vice president, or a responsible official as defined at 567 IAC 22.100(455B).

~~(2)~~2. For partnerships, a general partner.

~~(3)~~3. For sole proprietorships, the proprietor.

~~(4)~~4. For municipal, state, county, or other public facilities, the principal executive officer or the ranking elected official.

**ITEM 3.** Amend subrule **23.1(2)**, introductory paragraph, as follows:

**23.1(2)** New source performance standards. The federal standards of performance for new stationary sources, as defined in 40 Code of Federal Regulations Part 60 as amended or corrected through ~~November 16, 2007, June 2, 2008,~~ are adopted by reference, except § 60.530 through § 60.539b (Part 60, Subpart AAA), and shall apply to the following affected facilities.

The corresponding 40 CFR Part 60 subpart designation is in parentheses. Reference test methods (Appendix A), performance specifications (Appendix B), determination of emission rate change (Appendix C), quality assurance procedures (Appendix F) and the general provisions (Subpart A) of 40 CFR Part 60 also apply to the affected facilities.

**ITEM 4.** Adopt the following new paragraph **23.1(2)**“**zzz**”:

zzz. Stationary spark ignition internal combustion engines. These standards apply to each stationary spark ignition internal combustion engine whose construction, modification or reconstruction commenced after June 12, 2006. (Part 60, Subpart JJJJ)

**ITEM 5.** Amend subrule 23.1(4), introductory paragraph, as follows:

**23.1(4)** Emission standards for hazardous air pollutants for source categories. The federal standards for emissions of hazardous air pollutants for source categories, 40 Code of Federal Regulations Part 63 as amended or corrected through ~~April 8, 2008~~, July 22, 2008, are adopted by reference, except those provisions which cannot be delegated to the states. The corresponding 40 CFR Part 63 subpart designation is in parentheses. An earlier date for adoption by reference may be included with the subpart designation in parentheses. 40 CFR Part 63, Subpart B, incorporates the requirements of Clean Air Act Sections 112(g) and 112(j) and does not adopt standards for a specific affected facility. Test methods (Appendix A), sources defined for early reduction provisions (Appendix B), and determination of the fraction biodegraded ( $F_{\text{bio}}$ ) in the biological treatment unit (Appendix C) of Part 63 also apply to the affected activities or facilities. For the purposes of this subrule, “hazardous air pollutant” has the same meaning found in 567—22.100(455B). For the purposes of this subrule, a “major source” means any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit, considering controls, in the

aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants, unless a lesser quantity is established, or in the case of radionuclides, where different criteria are employed. For the purposes of this subrule, an “area source” means any stationary source of hazardous air pollutants that is not a “major source” as defined in this subrule. Paragraph 23.1(4) “a,” general provisions (Subpart A) of Part 63, shall apply to owners or operators who are subject to subsequent subparts of 40 CFR Part 63 (except when otherwise specified in a particular subpart or in a relevant standard) as adopted by reference below. The provisions of 40 CFR Part 60, Subparts A, B, Da, and HHHH for the Clean Air Mercury Rule (CAMR), are found at subrules 23.1(2) and 23.1(5) and in 567—Chapter 34.

**ITEM 6.** Amend paragraph **23.1(4)“cz”** as follows:

cz. Emission standards for stationary reciprocating internal combustion engines. These standards apply to new and existing major sources with stationary reciprocating internal combustion engines (RICE). These standards also apply to new and reconstructed RICE located at area sources. For purposes of these standards, stationary RICE means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. (Part 63, Subpart ZZZZ ~~as amended through April 20, 2006~~)

**ITEM 7.** Adopt the following new paragraphs **23.1(4)“eb,” “ec” and “eh”**:

eb. Emission standards for hazardous air pollutants for gasoline distribution area sources: bulk terminals, bulk plants and pipeline facilities. This standard applies to new and existing bulk gasoline terminals, pipeline breakout stations, pipeline pumping stations and bulk gasoline plants that are area sources for hazardous air pollutant emissions. (Part 63, Subpart

BBBBBB)

ec. Emission standards for hazardous air pollutants for area sources: gasoline dispensing facilities. This standard applies to new and existing gasoline dispensing facilities (GDF) that are area sources for hazardous air pollutant emissions. The affected equipment includes each gasoline cargo tank during delivery of product to GDF and also includes each storage tank. The equipment used for refueling of motor vehicles is not covered under these standards. (Part 63, Subpart CCCCCC)

eh. Emission standards for hazardous air pollutants for area sources: paint stripping and miscellaneous surface coating operations. This standard applies to new or existing area sources of hazardous air pollutant emissions that engage in any of the following activities: (1) paint stripping operations that use methylene chloride (MeCl)-containing paint stripping formulations; (2) spray application of coatings to motor vehicles or mobile equipment; or (3) spray application of coatings to plastic or metal substrate with coatings that contain compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni) or cadmium (Cd). (Part 63, Subpart HHHHHH)

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Date

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Richard A. Leopold, Director

## Administrative Rule Fiscal Impact Statement

Date: September 22, 2008

**Agency:** Department of Natural Resources

**IAC Citation:** 567 IAC 22.1(2)"r," 22.8(1), 23.1(2), and 23.1(4).

**Agency Contact:** Christine Paulson

**Summary of the Rule:** The rules will adopt new federal regulations affecting stationary internal combustion engines, gasoline distribution facilities and surface coating operations, and to amend the state air construction permitting requirements to better accommodate the new federal regulations. Additional, minor amendments to federal regulations are also being adopted by reference.

*Fill in this box if the impact meets these criteria:*

☒ No Fiscal Impact to the State.

☐ Fiscal Impact of less than \$100,000 annually or \$500,000 over 5 years.

☐ Fiscal Impact cannot be determined.

Brief Explanation:

Rule changes will not affect expenditures or revenues to the state.

*Fill in the form below if the impact does not fit the criteria above:*

☐ Fiscal Impact of \$100,000 annually or \$500,000 over 5 years.

\* Fill in the rest of the Fiscal Impact Statement form.

***Assumptions:***

***Describe how estimates were derived:***



***Estimated Impact to the State by Fiscal Year***

	<u>Year 1 (FY     )</u>	<u>Year 2 (FY     )</u>
<b>Revenue by Each Source:</b>		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
<b>TOTAL REVENUE</b>	_____	_____
<b>Expenditures:</b>		
GENERAL FUND		
FEDERAL FUNDS		
Other (specify)		
<b>TOTAL EXPENDITURES</b>	_____	_____
<b>NET IMPACT</b>		

X This rule is required by State law or Federal mandate.

*Please identify the state or federal law:*

Clean Air Act sections 110, 111 and 112, as codified in 40 Code of Federal Regulations, Parts 60 and 63.

\_\_\_ Funding has been provided for the rule change.

*Please identify the amount provided and the funding source:*

X Funding has not been provided for the rule.

*Please explain how the agency will pay for the rule change:*

The agency will not need additional revenue to implement this rule.

***Fiscal impact to persons affected by the rule:***

The rule changes will primarily affect regulated parties (industry) with applicable air emissions or emission equipment. This rulemaking will incorporate federal new source performance standards (NSPS) and emission standards for hazardous air pollutants (NESHAP). Owners and operators of affected air emissions sources are subject to the federal requirements whether the state incorporates these federal requirements into the Iowa Administrative Code or not. Therefore, the incorporation by reference of the federal standards will not impose any additional costs to the effected sources.

The amendments to the construction permit exemption for internal combustion engines will require completion and submittal of a registration form. The time needed to complete the registration is expected to be minimal and should assist the facility in understanding the complex and lengthy NSPS and NESHAP regulations affecting these engines. The amendments to the rules for permit by rule for spray applications (PBR) will lengthen the required notification form. Additional time needed to complete the additional questions is expected to be minimal and should assist the facility in understanding the NESHAP regulations affecting surface coating operations.

***Fiscal impact to Counties or other Local Governments (required by Iowa Code 25B.6):***

Some county or local governments may be impacted by the NESHAP or NSPS being adopted. However, as mentioned above, affected entities will be required to comply with the federal requirements whether the state adopts the standards or not. No other fiscal impacts expected.

\* If additional explanation is needed, please attach extra pages.

Agency Representative preparing estimate: Christine Paulson  
Telephone Number: 515 242-5154

**PUBLIC PARTICIPATION RESPONSIVENESS SUMMARY  
FOR  
567 IOWA ADMINISTRATIVE CODE CHAPTER 22 CONTROLLING POLLUTION  
AND CHAPTER 23 EMISSION STANDARDS FOR CONTAMINANTS**

**Introduction**

The primary purpose of the rule changes is to adopt new federal regulations affecting stationary internal combustion engines, gasoline distribution facilities and surface coating operations, and to amend the state air construction permitting requirements to better accommodate the new regulations. Additional, minor amendments to other federal regulations are also being adopted.

The Notice of Intended Action was published in the Iowa Administrative Bulletin (IAB) on November 5, 2008, as ARC 7306B. A public hearing was held on December 8, 2008. No comments were provided at the public hearing. Two sets of written comments were received before the public comment period closed on December 9, 2008. A summary of the comments and the Department's response is provided below.

**Public Comment:**

A summary of written comments submitted by Gina Grier, Air Planning and Development Branch, EPA Region VII:

EPA had no critical comments regarding the rule amendments themselves and generally supports Iowa accepting delegation of EPA's New Source Performance Standards (NSPS) and National Emissions Standards for Hazardous Air Pollutants (NESHAP).

However, EPA requested that the Department make a clarification regarding Item 7 in the preamble for the final rulemaking. In the Notice, the Department stated that it was working with EPA Region VII to issue compliance extensions on a case-by-case basis to new large gasoline dispensing facilities (GDF) that were unable to install the required vapor balancing system equipment by the NESHAP compliance date. EPA noted that neither the Department nor EPA has the authority to issue a compliance extension to a new or reconstructed facility.

**Department Response:**

At the time this rulemaking was originally proposed, the Department believed that GDFs would be eligible under the federal regulations to apply for and receive a compliance extension of up to one year. Upon further review of the NESHAP regulations and discussions with EPA Region VII, the Department now realizes that formal compliance extensions are only available for facilities considered "existing" under the NESHAP, and not those considered "new" or "reconstructed."

**Recommended Actions**

The Department agrees that it is appropriate to clarify in the preamble for the final rules that new GDF are not eligible for formal compliance extensions. In the absence of providing formal compliance extensions, the Department is working with new GDF that have not met the

NESHAP deadlines to ensure that these facilities install the required vapor balance systems as expeditiously as possible.

**Public Comment:**

A summary of written comments submitted by Fredrick A. Van Schepen, Senior Engineer, John Deere Waterloo Works:

The commenter submitted a two-page letter regarding Item 1 of the rulemaking, the amendment to the construction permit exemption for stationary internal combustion engines less than 400 horsepower (HP). The main topics of the commenter's letter are summarized below.

1. The commenter summarized the NSPS rule requirements for stationary compression ignition (CI) engines (Subpart IIII). In general, the commenter indicated that all CI engines purchased after model year 2007 except for fire pump engines would automatically meet the NSPS requirements. Although the commenter acknowledged that fire pump engines, used engines and modified or reconstructed engines may not automatically be in compliance with the NSPS, the commenter felt that these types of units would be limited in number. Overall, the commenter felt that requiring new CI engines and the limited number of other CI engines to submit a registration to the Department would be a burden on facilities and on the Department. The commenter further suggested that education of the regulated community would be a better use of the Department's resources.
2. The commenter summarized the requirements for the NESHAP for reciprocating internal combustion engines (RICE). In general, the commenter indicated that registration requirements were not a benefit because the NESHAP only requires compliance with the NSPS for most types of engines, and that only a limited number of engines would have additional requirements under the NESHAP beyond the NSPS.
3. The commenter asked whether nonroad engines being installed on nonroad equipment that were being tested on an assembly line would qualify for an exemption from the NSPS and NESHAP and whether these engines would be exempt from the requirement to submit a registration.
4. In closing, the commenter stated that John Deere Waterloo Works could only find a few instances in which the registration would be a benefit to the regulated community, and respectfully requested that the registration requirements for 400 HP engines be removed from the final rulemaking.

**Department Response:**

The Department respectfully disagrees with the commenter's suggestion that requiring engine registration offers no benefit to the regulated public and that the registration would be overly burdensome to the regulated public and to the Department. The Department's responses to the main points of the commenter's letter are as follows:

1. The Department acknowledges that many owners and operators purchasing new, non-emergency CI engines at this time will likely be able to purchase manufacturer certified engines. However, as the commenter stated, fire pump and other emergency engines are not yet required to be manufacturer certified. Additionally, owners and operators may purchase a used engine or an imported engine that may be subject to the NSPS but may not be manufacturer certified. Further, the NSPS requirements for spark ignition (SI) engines (Subpart JJJJ) do not require all types of engines to be manufacturer certified. The commenter did not provide any opinion on whether the registration requirements were appropriate for SI engines.

It is important to note that the manufacturer certification requirements are not the only requirements under the NSPS. The NSPS also contains fuel use requirements, operating requirements and recordkeeping requirements. The registration forms will assist owners and operators with these requirements.

In addition, owners and operators may install and operate portable engines at their facility. Some portable engines are considered to be nonroad and are not subject to the NSPS, while other portable engines are considered to be stationary and are subject to NSPS and to the registration requirements. An owner or operator may alter the use or location of portable engines at the facility that could affect NSPS applicability. The registration forms will assist owners and operators with determining whether a portable engine is covered under the NSPS.

For these reasons, the Department maintains that requiring registration for both CI and SI engines is appropriate and that registration will ultimately benefit the regulated community and the Department. As described in the Notice preamble, the registration forms provide owners and operators with a brief series of questions to assist them with NSPS and NESHAP compliance. The information that the owner or operator must complete and submit to the Department is minimal and should not be burdensome. Rather, most of the information on the registration form and the attached appendices provides important applicability and compliance information.

John Deere Waterloo Works is in the position to be well-versed in NSPS requirements for engine owners and operators and may also be in the position to easily acquire manufacturer certified engines. Other industries and facilities, particularly small businesses, may be unfamiliar with the complex and lengthy NSPS requirements and would benefit from the information provided on the engines registration forms and appendices.

2. While it is true that the NESHAP generally requires only NSPS compliance for most types of engines and facilities, many owners and operators at small businesses may not be familiar with either the NSPS or NESHAP requirements. The registration forms will provide the necessary applicability and compliance information to these facilities.
3. The amendments to the 400 HP exemption requiring registration apply only to those engines subject to the NSPS (Subparts IIII and JJJJ) and the RICE NESHAP. Owners or

operators of nonroad engines and owners and operators that conduct testing of nonroad engines that are not covered under the NSPS or NESHAP would not be required to submit registrations.

4. As noted in response #1 above, the Department believes that many owners and operators will benefit from completing and submitting the engine registration forms. The Department received positive feedback on the rule changes and registration forms from other stakeholders. Stakeholders providing informal input included the Iowa Department of Economic Development, the University of Northern Iowa – Iowa Air Emissions Assistance Program, Iowa Limestone Producers Association, Iowa Association of Municipal Utilities, consultants and engine distributors. Overall, these stakeholders indicated that the registration forms would be helpful to their clients, customers and members, and that completing the registration forms would not be overly burdensome. The Department also believes that compliance with the NSPS and NESHAP will increase through use of the registration forms.

**Recommended Actions**

No action recommended.